Oliver Clark

https://www.linkedin.com/in/oliverclark15/
https://github.com/oliverclark15/

Email : oliver.clark2@mail.mcgill.ca
Mobile : +1-802-377-2870
Goshen, Vermont

EDUCATION

- **McGill University** — Montreal, QC, Canada
  Faculty of Engineering, Bachelor of Software Engineering (BSE) — *2015-2019*

- **Relevant Coursework**

  - **Computer & Software Engineering** : Algorithms & Data Structures, Algorithm Design, Applied Machine Learning, Artificial Intelligence, Distributed Systems, Computer Organization, Database Systems, Intro to Software Eng., Model-Based Programming, Operating Systems, Parallel Computing, Realistic Image Synthesis, Signals & Networks, Software Engineering Practice, Software Delivery, Software Validation
  - **Mathematics** : Discrete Math, Calculus III, Linear Algebra, ODEs for Engineers, Probability & Stats for Engineers

EXPERIENCE

- **The MITRE Corporation** — Bedford, MA
  Cyber Security Intern — *May 2018 - August 2019*

  - Identified potential vulnerabilities in a simulated avionics environment before proposing mitigation techniques to the team through documentation and presentation
  - Developed prototype Git infrastructure to allow fast code search and fine-grained access control on secure files for an internal project
  - Performed security based code evaluations on internal and open-source applications using tools such as Fortify, Klocwork, and Semmle
  - Created a continuous integration & deployment pipeline to be used in development of an internal Python project

PUBLICATIONS

- D. Abric, <u>O. E. Clark</u>, M. Caminiti, K. Gallaba, and S. McIntosh , "Can Duplicate Questions on Stack Overflow Benefit the Software Development Community?", In *Proceedings of the 16th International Conference on Mining Software Repositories (MSR), Mining challenge,* pp. 230–234, May 2019.

PROJECTS

- **Viking Chess AI** — Artificial Intelligence - *Winter 2018*

  - Developed a Java game playing agent to play Viking Chess utilizing a unique variation of a mini-max algorithm
  - Game agent competed in a round robin style tournament against 300+ classmates

- **Distributed Reservation System** — Distributed Systems - *Fall 2018*

  - Distributed a Java reservation system across several servers by using a middleware based tiered architecture
  - Fully implemented persistent memory, failure handling, 2-phase commit, and 2-phase locking

- **Full Stack Web Application** — Database Systems - *Winter 2018*

  - Developed an online grocery store web application using Angular 2, Flask, and PostgreSQL
  - Primary contributor for the backend (database) component. Optimized queries for faster content delivery and designed database structure to meet the applications requirements
  - Worked in a four person team and using Git version control and GitHub issues as a primary method of project management

PROGRAMMING LANGUAGES & TECHNOLOGIES

- **Languages** : Java, Python, C/C++, Bash, SQL, JavaScript, HTML/CSS

- **Technologies** : Git, JUnit, Maven/Gradle/CMake, TravisCI, Docker, Android Studio, Flask, Angular 2, PostgreSQL, openSCAD, Latex, CUDA